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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/629,094
Filing Date: July 29, 2003
Appellant(s): GIFFIN, BRIAN P.

Kenneth E. Levitt
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 16, 2007 appealing from the Office action mailed January 12, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,341,915	Cordia et al.	8-1994
5,129,641	Long	7-1992
5,038,915	Delsanto	8-1991

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cordia et al.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long in view of Cordia et al.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long in view of Cordia et al., and further in view of Delsanto.

These rejections were set forth in the prior Office Action, mailed on January 112, 2006. They are repeated below.

Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cordia et al. (U.S. Patent No. 5,341,915), as in the paper of June 22, 2005.

Cordia et al. shows a method of delivering articles, which could be blanks, to a module by providing a first conveyor formed by sections 20 and 21 that sequentially receive articles in an end-to-end relationship. The first conveyor receives the articles when operating at a first velocity matching the velocity of the incoming blanks and then accelerates the blanks to a second velocity that matches the speed of a second conveyor 11 in response to the detection of a leading edge of the article with a photodetector P1 so that the articles may be transferred from the first conveyor to the second conveyor. After the article is transferred, the velocity of the first conveyor is reduced after a predetermined period of time in response to the sensing of the article by the photodetector so that the article on the first conveyor immediately adjacent the transferred article travels at a different velocity than the transferred article. The cycle is repeated for each article being transferred and is controlled by a controller 60 that calculates the delay time of the

cycle. The calculation of the delay time would inherently be based on the length of the articles being transferred. Thus, Cordia et al. operates with all the steps required by claims 9-12.

In regard to the added limitation of claim 9, that the method include a step of repeating the detecting, accelerating, transferring and decelerating steps for each subsequent blank, Examiner generally agrees with applicant's characterization of Cordia et al. on page 11 of the reply filed October 26, 2005 that whether the phasing conveyors 22 and 25 are accelerated, decelerated, or maintained at the same velocity is determined as a result of the detecting step so that over a long period of operation, the first conveyor is not always accelerated in response to the detecting step. However, Cordia et al. still meets the added limitation of claim 9 that the detecting, accelerating, transferring, and decelerating steps are repeated for each subsequent blank because the claims do not require that the first conveyor is always accelerated in response to the detecting step. The claim only requires that the first conveyor be accelerated in response to the detecting step for a number of subsequent blanks. Under various normal operating conditions, a number of subsequent blanks would each be accelerated in response to the detecting step so the detecting, accelerating, transferring, and decelerating steps would be repeated as required by the claim.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long (U.S. Patent No. 5,129,641) in view of Cordia et al., as in the paper of June 22, 2005.

Long shows an apparatus for transferring blanks in a conveyance mechanism comprising a feeder hopper that receives a plurality of substantially identical blanks and sequentially dispenses them to a feeder conveyor 18b including upper and lower belts 20 and 24 with receiving and discharge ends and a nip point at the receiving end. The feed conveyor is operably

coupled with the feeder hopper through the conveyor 18c to receive a plurality of planks dispensed from the feeder hopper. A servomotor that is capable of acceleration from a first velocity to a second velocity and deceleration from the second velocity to the first velocity is operably coupled with the feeder conveyor to drive the feeder conveyor. A carrier conveyor is positioned proximate the feeder conveyor so that a nip point between rollers 22 and 26 supporting upper and lower belts 20 and 24 is locates so that blanks may be fed from the feeder conveyor into the nip and received by the carrier conveyor. A photodetector 42B is positioned to detect the position of a leading edge of a given one of the blanks on the feeder conveyor as they approach the carrier conveyor. Thus Long shows generally all required by the claims except for a controller operably coupled to the servo motor and the blank detector which increased the speed of the feeder conveyor from the first velocity to the second velocity in response to the blank detector detecting the position of a given blank and to decrease the feeder conveyor from the second velocity to the first in response to the blank detector detecting the position of a given blank. However, Cordia et al. shows a conveyor system that employs a controller 60 operably coupled to a servo motor 64 of a feeder conveyor and an article detector P1 which increases the speed of the feeder conveyor from a first velocity to a second velocity matching the speed of a feeder conveyor 11 in response to the detector detecting the position of a given blank and to decrease the feeder conveyor from the second velocity to the first in response to the blank detector detecting the position of a given blank. Cordia et al. teaches that that controlling the conveyors in this fashion advantageously allows a continuously moving stream of articles input to the feeder conveyor with any varied spacing to be precisely discharged at to a carrier conveyor at the speed of the carrier conveyor. Therefore it would have been obvious to provide the

apparatus of Long with the control of Cordia et al. to ensure the precise discharge of blanks from the feeder conveyor. When this is done, Long would operate with all the steps required by claim 15.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long in view of Cordia et al., and further in view of Delsanto (U.S. patent No. 5,038,915), as in the paper of June 22, 2005.

Long and Cordia et al. show generally all the steps required by the claims except for the step of entering a blank length, first and second velocities into the controller of claim 13. However, Delsanto teaches that the length of each article in a conveyor of the type shows in long and Cordia et al. may be set into the controller formed by PLCs 80, 82, and 84 with an interface formed by a thumbwheel switch 70. Furthermore, first and second velocities are automatically entered into the controller from a tachometer 40 and motor output line 76. The length and velocities are used to calculate the length of the conveyor cycles. Delsanto teaches that this arrangement advantageously allows different length products to be transferred by the system. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Long and Cordia et al. with the interface and controller of Delsanto. When this is done, the resulting apparatus would have all the structure required by claims 16-20 and operate with all the steps required by claim 13.

(10) Response to Argument

In regard to the rejection of claim 9 under 35 U.S.C. 102(b), it should be noted that the applicant mischaracterizes the examiner's rejection by comparing the phasing conveyors 22 and 25 to the first conveyor of the claims and comparing the transfer conveyors 23 and 26 to the

second conveyor of the claims. However, as was repeated above, in the examiner's analysis, the first conveyor is formed by sections 20 and 21 (which include the phasing conveyors 22 and 25 and the transfer conveyors 23 and 26) and the second conveyor is formed by the conveyor 11 (which applicant refers to as the target conveyor). Based on this mischaracterization, the applicant makes four arguments. First the applicant argues that the objective of Cordia et al. is completely different from the objective of the present invention. Second the applicant argues that Cordia et al. fails to disclose the step of accelerating the first conveyor "from the first velocity to substantially match the second velocity." Third the applicant argues that Cordia et al. fails to disclose a method involving the four steps of "detecting, accelerating, transferring, and decelerating" for each blank because after detecting, accelerating the first conveyor, and transferring an article, Cordia et al. does not decelerate the first conveyor as required by the claim. Fourth, applicant argues that the four steps are not repeated "for each subsequent blank" as required by the claims. The examiner respectfully disagrees.

In regard to the first argument, it should be noted that this argument fails to comply with 37 CFR 1.111(b) because it amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In regard to the second argument, while it is true as the applicant points out, that the velocity of the transfer conveyors 23 and 26 is constant and 1.6 times the normal velocity of the phasing conveyors 22 and 25, it does not follow that the step of accelerating the first conveyor "from the first velocity to substantially match the second velocity" is not present because the examiner views the first conveyor as being formed by the conveyor sections 20 and 21 (which

include both the phasing conveyors 22 and 25 and transfer conveyors 23 and 26) as forming the first conveyor. As noted above, this conveyor is accelerated in sections to accelerate articles to match the speed of the second conveyor formed by the target conveyor 11. Thus Cordia et al. discloses the step of accelerating the first conveyor from the first velocity to substantially match the second velocity as required by the claim.

In regard to the third argument, the applicant asserts that Cordia et al. does not disclose a deceleration step following the transfer step prior to the next detection step because the phasing conveyor maintains the same speed until the detection of the next article is made. However, as the applicant notes in his remarks at the bottom of the first partial paragraph on page 6, the phasing conveyor has a normal velocity that is slower than the velocity of the target conveyor. The phasing conveyor would inherently return to this normal velocity after an article is accelerated and transferred, and in doing so, the first conveyor would be decelerated as required by the claim.

In regard to the fourth argument, while it is true that that the first conveyor will not accelerate every subsequent blank fed thereto in normal operation, this does not mean that Cordia et al. does not disclose a method in which the steps of detecting, accelerating, transferring and decelerating are repeated for each subsequent blank. This is because, in normal operation, the apparatus of cordial et al. would accelerate at least two adjacent blanks, and often more than two adjacent blanks, as it performs its phasing function. When this occurs, a method that comprises the steps of detecting, accelerating, transferring and decelerating and repeating these steps for each subsequent blank is disclosed. The fact that this method is performed for only a limited number of subsequent blanks does not mean that the steps aren't repeated for each

subsequent blank because the apparatus of Cordia et al. could be used to transfer a small number of blanks, such as only two or three, for which the steps of detecting, accelerating, transferring and decelerating would be repeated for each subsequent blank. Nothing in the claim requires the conveyor to accelerate for every blank fed thereto. The claims only require that the conveyor be accelerated for each subsequent blank in a given set, which would often occur in the normal operation of Cordia et al. when the sets are small. Finally, even if it is assumed for the sake of argument, that the claims require the steps to be repeated for every blank, it should be noted that the steps would be repeated for every blank under the normal operation of Cordia et al. when the blanks are fed to the first conveyor by the conveyor 15 with spacing that is consistently too large. Thus Cordia et al. discloses all the steps required by claim 9.

In regard to the rejection of claims 10-12 under 35 U.S.C. 102(b), the applicant argues that the step of decelerating the first conveyor after an elapsed predetermined period of time after the accelerating step, calculated with a controller based on a length of a given blank, is not disclosed by Cordia et al. The Examiner respectfully disagrees. While the specification of Cordia et al. does not discuss this aspect in detail, some period of time, however small, must inherently elapse between the accelerating step and the beginning of the decelerating step involved in returning the phasing part of the first conveyor to the normal speed. As the operation of the conveyors is coordinated by the controller 60, whatever time elapses between the accelerating step and the decelerating step would inherently be calculated by the controller based on the length of the articles being conveyed as the length of the articles determines their proper spacing on the second conveyor 11. As the claims do not define the predetermined period of

time, the type of controller, or the way in which the delay time is calculated in any more specific fashion, Cordia et al. discloses the steps required by claims 10-12.

In regard to the rejection of claims 15 under 35 U.S.C. 103(a), it should first be noted that the heading for this argument, heading 2, refers to claim 13 rather than claim 15. However, it is apparent from the body of the argument that the applicant intended to refer to claim 15. In arguing against this rejection, the applicant argues against the references individually rather than against the combined teachings of the references. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The applicant also repeats the arguments made with respect to Cordia et al. which were not persuasive for the reasons discussed above. Additionally, the applicant argues that the operation and function of Long and Cordia et al. are so different that it would not have been obvious to a person of ordinary skill in the art to combine their teachings. The examiner respectfully disagrees. Both references deal with conveying objects along a series of conveyors with predetermined spacing checked by a series of sensors. It is the examiners position that the two references in fact deal with similar problems and may be viewed as analogous art. Thus it is appropriate for the examiner to combine the teaching of Cordia et al., that employing a controller to control the conveyors in the manner described advantageously allows a continuously moving stream of articles to be fed with any varied spacing to be precisely discharged to a carrier conveyor at the speed of the conveyor as stated above, with the apparatus of Long to arrive at the method defined by claim 15.

In regard to the rejection of claim 13 under 35 U.S.C. 103(a), the applicant asserts that the claim is allowable for the same unpersuasive reasons discussed above with respect to claim 9. Additionally, the applicant asserts that Delsanto fails to disclose entering first and second velocities into the controller as required by the claim. The examiner respectfully disagrees. While it is true that Delsanto does not teach having a machine operator enter the first and second velocities in the manner described in the specification of the present application, it should be noted that there is no limitation in the claims that requires a machine operator to enter the first and second velocities into the controller. As was noted by the examiner above, the first and second velocities are entered into the controller automatically by the tachometer 40 and motor output line 76. Even is this arrangement merely monitors the speeds, it still includes the step of entering the information to the controller and thus Delsanto teaches all the steps required by claim 13.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

MARK A. DEUBLE
PRIMARY EXAMINER

md
July 7, 2007

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